

Name: _____ Pd: _____ Date: _____

Chapter 1 – REVIEW

Graph on a number line and put in interval notation

1) $-3x + 4 < -2$

2) $5(2x - 6) \leq -10$



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3) Write the equation of the line given the slope = -3 going through point (-2,-5). Circle your answer.

4) Write the equation of the line given the slope = $\frac{1}{5}$ going through point (-3,0). Circle your answer.

Write the equation of the line given the following points: Circle your answer.

5.) (2, 3) and (4, 1)

6.) (-4, 0) and (3, -2)

7) Write the equation of the line parallel to $4y = 3x + 12$ going through the point $(4,2)$. Circle your answer.

8) Write the equation of the line parallel to $-2x + 7y = -14$ going through the point $(14,-10)$. Circle your answer.

9) Write the equation of the line perpendicular to $2y = 3x - 10$ going through the point $(-6,1)$. Circle your answer.

10) Write the equation of the line perpendicular to $-3x - 6y = -6$ going through the point $(-5,0)$. Circle your answer.

Solve the following equation for the indicated variable. Circle your answer.

11) $y - y_1 = m(x - x_1)$; solve for x

12) $A = \frac{1}{2} h (b_1 + b_2)$; solve for h

Solve inequality. Determine if the answer is *sometimes*, *always*, or *never*. Circle your answer.

13) $2x + 3(x + 2) - 4x \geq -2x + 3(x + 4)$

14) $-6(x + 3) \geq 18$

15) $2(2x - 1) - x \leq 3(x + 3)$

16) Determine if the table represents a linear function? If so, write the equation of the line.
Circle your answer.

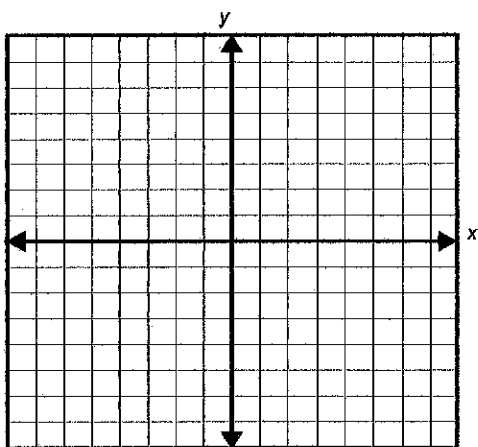
x	y
4	6
7	12
10	18
13	24

17) Determine if the table represents a linear function? If so, write the equation of the line.
Circle your answer.

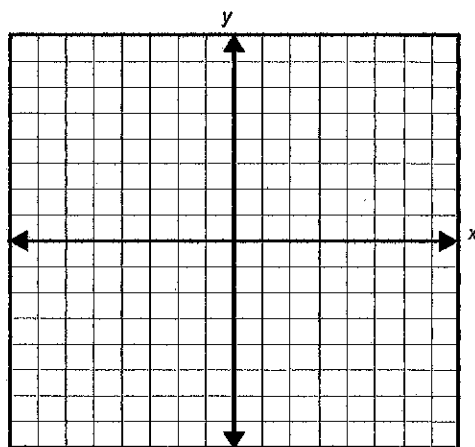
x	y
-3	4
0	8
3	12
6	16

Graph the line of the following:

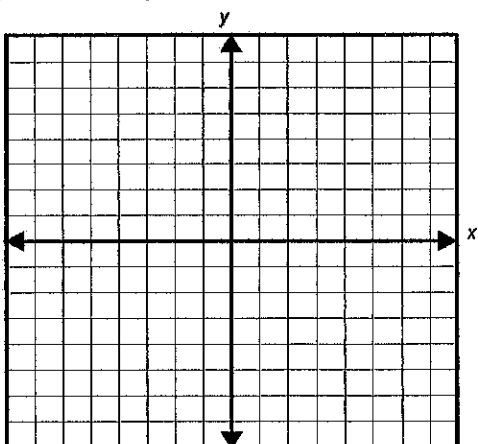
18) $y = -3x + 2$



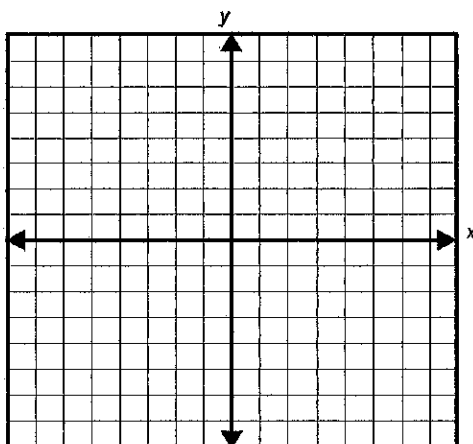
19) $y = x + 3$



20) $2x + 5y = -15$

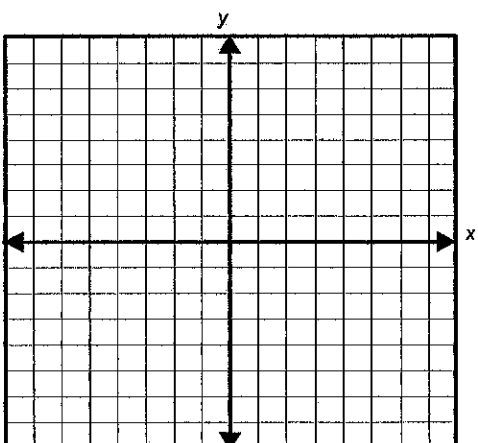


21) $-3x - 4y = -8$

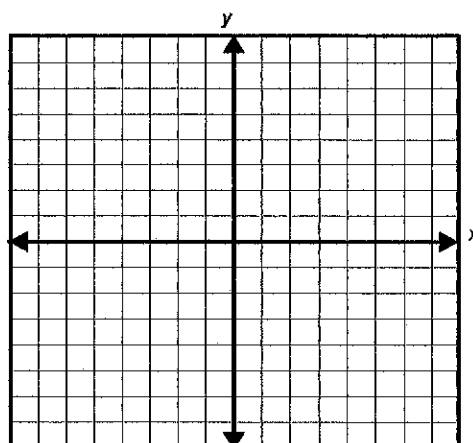


Graph the following inequalities:

22) $2x + 3y \leq 12$

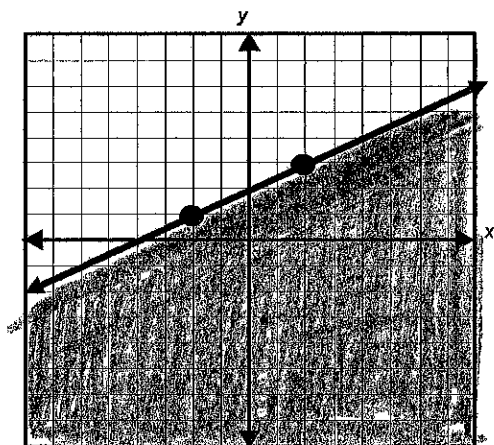


23) $-4x - 2y < -10$

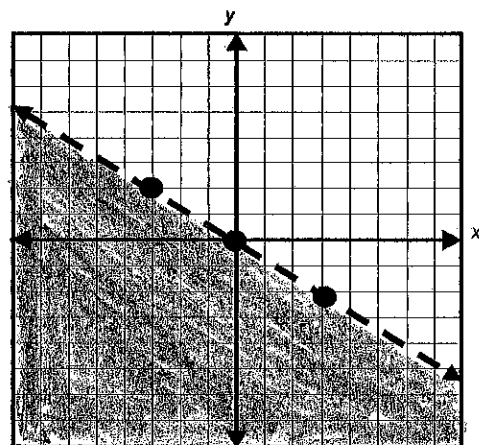


Write the equation of the following inequality

24)



25)



Determine the value of the following given the function:

26) $f(x) = 4x + 8$

$f(2)$

$f(-1)$

$f\left(\frac{7}{4}\right)$

27) $f(x) = -3x^2 + 2x - 5$

$f(0)$

$f(3)$

$f(-8)$

28) AND/OR statements: graph on a number line and write final answer in interval notation

$3x \geq 18$ or $-9x \geq 18$

$2x < 10$ and $2x > -4$



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Word Problems:

29) You have a summer job at a car wash. You earn \$8.50 per hour and are expected to pay a one-time fee of \$15 for the uniform. If you work x hours per week, how much will you make during the first week? Write the algebraic expression.

30)) In football, a touchdown (t) is worth 6 points, an extra-point kick (k) is worth 1 point, and a field goal (f) is worth 3 points.

a) What algebraic expression models the total number of points that a football team scores in a game, assuming each scoring play is one of the three given types?

b) Suppose a football team scores 3 touchdowns, 2 extra-point kicks and 4 field goals. How many points did the football team score?

31) The cost of a field trip is \$1,350 plus \$8 per student. If the school can spend at most \$2,600, how many students can go on the field trip?

32) A club offers two membership plans. You can pay \$75 per month and go as often as you like or you can pay \$25 per month plus \$4 per visit. How many times must you visit the club for the second membership to cost more than the first?